Joint Small Arms Systems

National Defense Industrial Association (NDIA)

Armament Division

2006 Division Status

15-18 May 2006
The Links – Who, What, Why

- National
  - All services
  - Industry
  - Jointness
  - International

- Defense
  - Worldwide Threats
  - Homeland Defense
  - Readiness
  - Technology and Operational Superiority

- Industrial
  - Industry Organization
  - Spokesman for Industry
  - Resources
  - Capability/Readiness

- Association
  - Visions
  - Innovative Solution
  - Communication
  - Sharing
  - Jointness
  - Linking Government and Industry

An Organization Ensuring Strength Through Industry and Technology
Objective: Coordinated Focus and Vision for Armament Systems

Armaments Division

Dave Broden

Committees

Future TBD
TBD

Small Arms Systems
Brian Berger
Program Chairman
Chuck Buxton

Guns, Ammunition, Rockets, Missiles
Mike Till

Guns/Ammunition
Rockets/Missiles

Responsive Organization – Ensures Relevance
Scope – Area of Interest – Responsibility
Definition Clarity
Expanding Cooperation with Related Sections

Themes, areas discussed; no specific action
Committee Focus for Symposium Attendees

• Selecting a Theme--- Relevant, Timely, and with a Vision

• Including keynoters and presentations that communicate effectively to inform and challenge the attendees

• Offer opportunities for attendee participation thru questions, panels, exhibits, demonstration, and networking.

• Address status of present capability while building awareness of evolving need, new technology, and new systems.

• Providing the framework for technology, system, or capability opportunities to enable meeting the Joint Service needs.
Meeting the Needs of Our Joint Ground Forces in the Fight Against Terrorism and Developing the Tools for Future Combat

Address and Focus on the Theme

DoD and Homeland Defense Capabilities

- Joint Force operations and capability
- Response to asymmetric threats
- Adapt systems and technology for operational flexibility — Jointness — Responsiveness
- Push technology envelope(s)
- Push integration efficiencies
- Add functional capabilities
- Introduce new systems
- Ensure readiness and capability

“Lessons Learned” — Readiness/Capability — Responsive Force — Jointness — Technology Change

Shape the Future — Enable the Force
Meeting the Needs—Enabling Forces—Defeating Terrorism-Future Tools for Combat

- Understanding the Need
- Joint Requirement(s)
- Requirements Pull
- Technology Push
- Readiness/Capability/Responsiveness
- Direct Integration
- System Integration Adaptations
- Spiral Development
- Supportability

- Threat Specific Solutions vs. Capability Driven and Adaptable
- Operational Flexibility and Responsiveness
- Industrial Base Readiness
- Spiral Development

Response to Symposium Theme
- Adaptable, Innovative, Visionary, Capability Focused
Committee Scope

Small Arms Systems
- Individual weapon(s)
- Crew served weapon(s) (e.g., ≤ 40mm)
- Lightweight Systems
- Ammunition
  - Enhanced/lightweight
  - “Green”
- Full life cycle management
- Supportability
  - Training
  - Logistics
- Target Acquisition/Fire Control System (TA/FCS)
- Remote Stabilized Turret System
- System Integration
- Networked capabilities
- Non lethal
- Homeland Defense systems

Gun and Missile Systems

Guns and Ammunition
- Medium caliber systems
- Tank systems
- Mortar systems
- Artillery systems
- Naval gun systems
- Aircraft/helicopter systems
- Precision systems
- Platform Integration
- Manned/robotic applications
- System integration
- TA/FCS
- Supportability
- Life cycle management
- Stabilized Turret System

Missiles and Rockets
- Tactical missiles and rockets
- Shoulder Fired Systems
- Ground launched
- Aircraft/helicopter launched
- Precision Systems
- System Integration
- Manned/robotic applications
- Life cycle management

Common Enabling Technologies, Modeling/Simulation, Man-Tech

Links to Other Committees

Synergism ➔ Commonality
Small Arms Systems Vision Forward

• Maintaining strong Small Arms community of government, industry, academia etc. focused to ensuring the technology, systems, and capabilities are state of art, ready, and responsive and linked to joint service needs—R&D and Production

• A forum for addressing and communicating changes in requirements, evolving technologies, and new systems—

• Continuing the tradition of Small Arms Systems focus on weapons and ammunition and adding the “new”—full system vision of fire control, networks, smart capabilities that enable the small arms user to do his job better

• Enabling the Small Arms community a forum with opportunity for networking resulting in co-operation, sharing, and understanding
Armament Division Forward Vision

• Symposium Program Content Focus
  ___ Balance Program Presentations
    Vision of The Future—Requirements, Technology, Systems
    Discussion of Current Activities, Needs, Issues
    Include Enabling Technologies and Systems

• Increase Industry Presentations of Current, Evolving and Future Technology
  Systems
  Industrial Base
  Ensure Communication of Industry Initiatives and Innovation

• Symposium Attendee Input on Topics of Interest

• Executive Committee Initiatives to Seek Presentations on Key Topics
Armament Division Focus Topics

1. Ensuring Capability for the Warfighter
   - Current Systems
   - Refurbishment/Repair
   - Expendables

2. Responding to Urgent Technology/System Needs
   - “Lesson Learned” Responses
   - Adapting to New Threats and Conditions

3. Maintaining and Adapting the Industrial Base
   - DOD Organic Base
   - Industrial Base
   - Helping to shape the future capability

4. Establishing and Transitioning New Technology and Systems
   - Requirement Process Effectiveness
   - Addressing Total System Integration Descriptions
   - Program Decision Milestones
   - Schedules/Spiral development and Technology Insertion
   - Funding
5. Understanding Budgets and Funding
   Shaping Development Plans leading to New Systems
   Maintaining Production to ensure Readiness

6. Transitioning the Workforce
   Attention to DOD Technical Manpower Study--
   Mentoring effectively
   Enabling the entry Workforce—Ensuring skilled resources

7. Evolving New Technology To Readiness for System Applications
   Understanding the Need
   “Maintaining Innovation” thru effective Industry and Government investments
   Establishing vision of Small Arms Systems in the Future

8. Maintaining Technical Data Packages (TDP’s) and related data to ensure timely and quality production

9. Increasing Executive Committee representation of all services
Bottom Line

NDIA Focus ➔ Responsive to Industry/DoD Community ➔ Ensures Relevance

Addressing Issues Critical to Small Arms Systems—Supporting Joint Service Objectives

Armament Division Focus
• Expanded participation
• Resource for government and industry
• Linked to key DOD and service strategies
• Capture “lessons learned” ➔ ensure readiness ➔ shape future
• Encouraging leverage of complementary systems
• Effective use of exhibits, demonstrations, and tours

Establishing Vision for 21st Century Relevance

Applying System Synergism to Meet Transformation Goals
2006 Symposium

Enhancing Our Capability and Evolving for Tomorrow

Addressing the Theme!

- Joint Capability
- Joint Requirements
- Readiness Capability

Applying Common Advanced Technologies and Integrated Systems

- Capability focused complementary integrated systems
- Strengthening Legacy Systems while evolving “new”
- Address key force multipliers
  - Precision
  - Mobility
  - Communication
- Planning and implementing Spiral Development

- Building on “lessons learned” for future readiness
- Priority to supporting the Warfighter
- Ensuring responsive industrial base capability
- Attention to life cycle management

Enabling an Integrated Joint Force Capability
Symposium Attendance Realizing Growth

- Gun and Missile Systems
  Attendance---350-500 in last 5 years

- Small Arms Systems
  Attendance—400-550 in last 5 years

Expanded Participation
New Attendees and repeat attendees
Attendee Comments Impacting Program Content
Growth of Exhibits
Continued International participation

- Interest and Activity Continues to Grow
- Armament Division meets Needs of Government and Industry
Symposium Observations

**Linking NDIA and DoD Realized**

- Improved links to DoD and service thrusts and initiatives
- Interest in "after action reports" — "lessons learned" → industry responsiveness → addressing challenges

**Symposium Quality and Communication Demonstrated**

- Presentation quality improvements and "So What" benefit messages have added value
- Focused interest in systems level presentation vs. technology unless technology offers payoff vision
- Industry adjusted to intellectual property concerns and expanded participation positively
  - Industry worked with vision
Armament Division Success

Guns and Ammunition/Missiles and Rockets

Value Added Has Been Demonstrated

Leadership to Strengthen the Armament Community

Challenge: Applying Technology, Systems for Future Force

Ensuring Readiness . . . . Responding to the Challenge Advancing Superior Capability

Symposium Benefits Confirmed

Increasing Interest/Participation
2006 Armament Division Highlights

- Leadership for National Small Arms Consortium and Center Executive Committee
  Research Committee and Subcommittees
- Participation in Industrial Base Status and Needs Briefings
  Communication of Situations, Changes and Actions
- Armament Division Executive Committees demonstrated Leadership
  Multiple Meetings
  Expanded Participation
  Shaping the Future
- NDIA Armament Division Contacted by Government and Industry for expertise to address specific needs---
  Talent and Experience benefited specific activity
2006 Armament Division Highlights

• Symposium Attendance Strong and Growing

• Symposium Exhibits Effective and Quality Enhanced

• Integration of Guns and Ammunition and Rockets and Missiles provides strong system and technology synergism—realizing benefits

• Executive Committee activity strengthened an increased

• Government and Industry Partnership in Division leadership demonstrated

Armament Division leadership strength enables strategic focus to address current and future needs
Objective: International cooperation and integration of symposiums benefiting industry and Department of Defense to encourage partnerships for development, production, and interoperability

Approach:  
- Coordination of NDIA Armament Division programs with “Symposium at Shrivenham” The Royal Military College of Science
- Common presentations and panel participants is a strong “open door” resource

European Small Arms and Cannon Symposium  
22-24 August 2006
2006 Top Defense Issues

• Issue 1: Sustain the Defense Industrial Base

• Issue 2: Sustain Overall Military Readiness While Continuing the Global War on Terrorism and Preparing for Future Defense Transformation

• Issue 3: Improve the Integrity and Responsiveness of the Acquisition Base

• Issue 4: Improve Small Business Opportunities

• Issue 5: Strengthening the National Security Workforce

NDIA Board of Directors Approved Focus

Established by Government Policy Advisory Committee

Look to Web Site for Full Details

These Issues are NDIA Membership Voice to Congress
NDIA Communications

- National Defense Magazine
  - Emphasis on relevant and timely topics
  - Frequently source of media, DoD, and Congressional reference

- Website
  - Symposium presentations available — attendee access
  - Complementary information
  - Full list of activity

- Top public policy issues — prioritized — addressed to Congress — strengthen the community

NDIA Messages and Content Has Impact

and

Website Used Extensively as Resource
Armament Division 2006 Challenges

- Ensuring Symposium Presentations offer “Value Added” content
- Focusing Symposium Topics to address—”Critical—Relevant—Priority subjects
- Enabling communications of evolving Small Arms technology, systems, and operational integration
- Evolving Symposium/Exhibit format to enhance communication and understanding ---apply innovation effectively
- Integrating Symposium Format enabling Attendee input and interaction—use new presentation formats and technology
- Providing individual expertise in response to requests for support
- Matching Attendee topic interest to the program structure---Solicit topics of interest as well as presentations when issuing call for papers.
- Become recognized as a resource to go to for “Problem solving” or assessing needs or alternatives---support special studies.
Leadership Vision

NDIA Armament Division Is:

• A relevant voice and forum
• Responsive to DoD community and industry challenges
• A forum for DoD/industry interaction discussion of “lessons learned” and needs
• Supporting national defense through people resources, networking, and symposiums
• Transforming to ensure relevance to changing military, geopolitical environments, technology, and industrial base resources

The NDIA Community is the Resource of Choice For Excellence in National Defense Topics/Communications